

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
November 2003**

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during November was excessive for the sixth consecutive month. The maximum daily mean discharge of 30,700 cfs occurred on November 21. The minimum daily mean discharge was 5,700 cfs on November 18.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during November was 13,000 cfs, which is 296 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 13,410 cfs, or 251 percent of median (water years 1961-90).

On the basis of an 5-station average, precipitation during November was 3.98 inches, which is 105 percent of the 62-year average. The maximum daily-average precipitation during the month was 1.73 inches on November 20. Precipitation in the upper Delaware River Basin during the past 12 months was 12.26 inches more than the long-term average. Precipitation during November was 0.19 inches more than the long-term average for the month.

Combined storage December 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 275 billion gallons was 3 billion gallons less than that of one month ago and 81 billion gallons more than that of one year ago. **Combined storage on December 1, 2003, was the highest of record for the first day of December.** Median storage on the first day of December in 36 years of record is 172 billion gallons. Pepacton, Cannonsville and Neversink Reservoirs spilled 26, 30 and 2.4 billion gallons, respectively, in November.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during November were above average in all of the wells. Water levels in all of the wells were above October 2003 and November 2002 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Nov. 2002		December 2002 to November 2003					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Dec.	3.35	43.17	4.66	55.43	139	128	+1.31	+12.26
Jan.	2.98	39.82	2.64	50.77	89	127	-.34	+10.95
Feb.	2.63	36.84	2.97	48.13	113	131	+.34	+11.29
Mar.	3.36	34.21	*3.03	45.16	90	132	-.33	+10.95
Apr.	3.74	30.85	*2.80	42.13	75	137	-.94	+11.28
May	4.22	27.11	*3.71	39.33	88	145	-.51	+12.22
June	3.99	22.89	6.87	35.62	172	156	+2.88	+12.73
July	4.02	18.90	3.95	28.75	98	152	-.07	+9.85
Aug.	3.82	14.88	4.80	24.80	126	167	+.98	+9.92
Sept.	3.88	11.06	10.39	20.00	268	181	+6.51	+8.94
Oct.	3.39	7.18	5.63	9.61	166	134	+2.24	+2.43
Nov.	3.79	3.79	3.98	3.98	105	105	+.19	+.19

Note: Amount shown in cumulative columns is total from month shown to present.

* Revised since last month.

STREAMFLOW, IN CFS DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2002			2003 Monthly mean	Percent of median
	Maximum	Median	Minimum		
November (observed)	11,760 (1951)	4,396	995 (1964)	13,000	296
November (adjusted)	16,160 (1972)	5,673	390 (1964)	13,410	236
December (observed)	18,830 (1996)	4,890	1,665 (1998)		
December (adjusted)	20,880 (1973)	6,276	1,624 (1998)		